

SEMESTER III

KUMAUN UNIVERSITY, NAINITAL
SYLLABUS (P.G. Class)
[2017-18 and Onwards]

ECONOMICS SEMESTER SYSTEM

| Code | Course | | |
|-----------------------|---|--|--|
| SEMESTER – I | | | |
| 1211 | Microeconomics – I | | |
| 1212 | Quantitative Methods in Economics I | | |
| 1213 | Public Finance I | | |
| 1214 | Indian Economic Development & Policy I | | |
| SEMESTER – II | | | |
| 1221 | Microeconomics – II | | |
| 1222 | Quantitative Methods in Economics II | | |
| 1223 | Public Finance II | | |
| 1224 | Indian Economic Development & Policy II | | |
| SEMESTER – III | | | |
| 1231 | Advanced Macroeconomics III | | |
| 1232 | International Economics III | | |
| 1233 | Economics of Growth & Development III | | |
| | Optional Paper- III | | |
| SEMESTER - IV | | | |
| 1241 | Advanced Macroeconomics IV | | |
| 1242 | International Economics IV | | |
| 1243 | Economics of Growth & Development IV | | |
| | Optional Paper- IV | | |

List of Optional Papers:(8) Research Methodology& Essay on Current economic issues,(9*) Regional Economics (10)Agricultural Economics,(11) Labour Economics, (12*) Environmental Economics(13)Econometrics(14)Advanced Statistics, ,(15) Demography (16) Industrial Economics, (17*) Economics of Infrastructure,(18*) Economics of Gender and Development,(19*) Economics of Insurance,(20)*Financial Intuitions & markets (21*)Computer Applications in economics. (22) History of Economic Analysis

Note: Each optional Paper has been divided into two parts. Candidate is required to opt one of the Optional paper, Part-I of the Optional Paper in IIIrd Semester and Part-II of the same Optional Paper in IVth Semester. Optional Papers(9*,12*,17*,18*,19*,20*;21*) can be opted only on the availability of specialized staff and infrastructure in the concerned department/affiliated colleges.

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1. ADVANCED MACRO ECONOMICS-I
PAPER CODE 1231
2. INTERNATIONAL ECONOMICS-I
PAPER CODE : 1232
3. ECONOMICS OF GROWTH AND DEVELOPMENT
PAPER CODE : 1233

(OPTIONAL PAPER)

1. RESEARCH METHODOLOGY AND ESSAY
PAPER CODE :
2. REGIONAL ECONOMICS*
PAPER CODE :
3. AGRICULTURAL ECONOMICS
PAPER CODE :
4. LABOUR ECONOMICS
PAPER CODE :
5. ENVIRONMENTAL ECONOMICS*
PAPER CODE :
6. ECONOMETRICS
PAPER CODE :
7. ADVANCED STATISTICS
PAPER CODE :
8. DEMOGRAPHY
PAPER CODE :
9. INDUSTRIAL ECONOMICS
PAPER CODE :
10. ECONOMICS OF INFRASTRUCTURE *
PAPER CODE :
11. ECONOMICS OF GENDER AND DEVELOPMENT*
PAPER CODE :
12. *ECONOMICS OF INSURANCE**
PAPER CODE :
13. FINANCIAL INSTITUTIONS AND MARKETS
PAPER CODE :

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ADVANCED MACRO ECONOMICS-I PAPER CODE 1231

National Income and Related Concepts. Circular flow of Income. Measurement of National Income. Problems in the Measurement of National Income.

Types of Macroeconomics Say's Law of Market, Determination of the level of output and Employment, Criticism of Say's Law, Classical, Keynesian Economics.

Post-Keynesian Approaches, Theory of Output and Employment. Consumption Function, Saving and Investment Function - Keynesian approach, Keynesian Psychological Law of Consumption, Paradox of Thrift, Friedman's approach. Investment Function- Determinants of Investment. Concept of Multiplier, Acceleration Principle.

Keynesian Economics and Developing Countries.

Comparison of Classical and Keynesian Model.

Recommended Reading (Latest Editions) :

1. Ackley, G., Macroeconomics : Theory and Policy, Macmillan, New York
1. Dornbusch, R. and F. Stanley , Macroeconomics, Mc Graw Hill, New York.
2. Jha, R., Contemporary Macroeconomic Theory and Policy, Wiley Eastern, New Delhi.
3. Vaish, M.C., Macroeconomic Theory, Vikas, New Delhi.
4. Romer, D.L., Advanced Macroeconomics, Mc Graw Hill, New York.
5. Gupta, S.B., Monetary Planning in India, OUP, New Delhi.
6. Reddy, Y.V., A Review of Monetary and Financial Sector Reforms in India, UBSPD, New Delhi.
7. Frisch, H., Theories of Inflation, Cambridge University Press.
8. Rakshit, M., Studies in the Macroeconomics of Developing Countries, OUP, New Delhi.
9. Vasudevan, A., Central Banking for Emerging Market Economies, Academic Foundation, New Delhi.
10. Rana K.C. and K.N. Verma, Macro Economic Analysis, Vishal Publishing Co., Jalandhar.
11. एम० एल० झिंगन, समष्टि अर्थशास्त्र, वृन्दा पब्लिकेशन, नई दिल्ली।
12. एच० एल० आहूजा, उच्चतर समष्टि अर्थशास्त्र, एस० चौद, नई दिल्ली।

SEMESTER III

Paper -2 INTERNATIONAL ECONOMICS-I PAPER CODE : 1232

The Theories of International Trade: classical theory with relaxed assumptions. Haberler's theory, The Heckscher-Ohlin Theory. Extension of Heckscher-Ohlin Theorem. . Factor Price Equalization Theorem. Leontief Paradox, The Rybcznyski theorem, Linder's Representative Demand Hypothesis. Consumption Pattern.

Gains from Trade, and Terms of Trade- Reciprocal Demand and Supply Curves, Concepts of Terms of **Trade** their Uses and Limitations, Hypothesis of Secular Deterioration of Terms of Trade. Trade as an engine of Growth Shifts in Demand : . Economic Growth and International Trade: The Concept of Immiserizing Growth. . Welfare Implications, Policy issues.

Trade Policy-Free Trade and Protectionism Methods of Trade Interventions:- Tariffs, Import Quota and Non-Tariff Barriers, Optimum and Effective tariff rates. Economic Effects of Tariffs and Non-tariff Barriers. Theory of custom Union, Trade under Imperfect Competition. International Economic Integration, GATT/Globalization and New International Economic order under WTO.

Recommended Reading (Latest Editions) :

- 1.Sodersten, Bo., International Economics, MacMillan, London.
- 2.Salvatore, D., International Economics, John Wiley, NewYork.
- 3.Krugman, P.R., International Economics, Add Wesley Longman, Delhi.
- 4.Mannur, H.G., International Economics, Vikas Publishing House, New Delhi.
- 5.Bhatia, H.L., International Economics, Vikas Publishing House, New Delhi.
- 6.Meier G. M., Leading Issues in Economic Development, OUP, Mumbai.
- 7.Caves, R.E., et.al., World Trade and Payments, Harper Collins, U.
- 8.Chacholiades, M., International Trade Theory and Policy, McGraw Hill, New York.
9. Pearce, I.J., International Trade, Vols. I & II, Macmillan, London.
- 10.Bhagwati, J. and T.N. Srinivasan, Lectures on International Trade, MIT Press, Cambr
- 11.Bhagwati, J., ed., International Economics, OUP, New D.
- 12.Rana K.C. and K.N. Verma, International Economics, Vishal Publishing Co., Jalandhar.
- 13.एम० एल० झिंगन, अन्तर्राष्ट्रीय अर्थशास्त्र, वृन्दा पब्लिकेशन, नई दिल्ली।
14. Jajal R.S. & Bisht, N.S., Emerging Dimensions of Global Trade.
15. Jalal R.S., Trade Policy and Global Participation : Indian Experience, Swaroop & Sons, New Delhi.

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Paper-3

ECONOMICS OF GROWTH AND DEVELOPMENT

PAPER CODE : 1233

Meaning and Measurement of Economic Growth and Development. Characteristics of Under-Development. Poverty – Absolute and Relative. Measuring Development and Development Gap. Human Development Index and Other Indices of Development and Quality of Life. Theory of Demographic Transition.

Classical Theory-- Smith, Ricardo, Malthus. Marxian Theory of Capitalist Development. Schumpeterian View of Dynamic Evolution of Economy. Structural Analysis of Development. Development in Historical Perspective - The Rostow's Stages of Growth.

Partial Theories of Underdevelopment: Vicious Circle Theory. Social and Technological Dualism. Models of a Dual Economy: Nurkse, Lewis. Theory of the Big Push. Balanced and Unbalanced Growth. Critical Minimum Effort Thesis and Theory of Low Level Equilibrium Trap.

Recommended Reading (Latest Editions) :

1. Ghatak, S., (1986), An Introduction to Development Economics, Allen and Unwin, London.
2. Thriwall, A. P., (1978), Growth and Development, McMillan, London.
3. Meier, G.M., (1984) : Leading Issues in Economic Development, Oxford University Press, New
4. Higgins, B. (1959) : Economic Development, Norton , New York
5. Kindlerberger, C.P. and B. Harrik (1983) : Economic Development, McGraw-Hill, Tokyo.
6. Salvatore, D. and E. Dowling (1977) : Development Economics, Schuam's Outline Series in Economics, McGraw
7. Agarwal, A. N. and S.P. Singh, (Eds.) (1985) : Economics of Underdevelopment O.U.P., Lon.
8. Adelman I (1969) : Theories of Economic Growth and Development, Stanford University Press, Stanford
9. Sen, A.K. (ed.) (1971) : Growth Economics, Penguin, Harmondsworth.
10. Sundaram, R.M. (1984) : Development Economics : A Framework for Analysis and Policy.
11. Chenery, H. : Redistribution with Growth, Oxford University Pre
12. Todaro, M.P. : Economic Development, Longman, Lond
13. United Nations : Human Development Report.
14. Misra, S.K.&V.K. Puri, Economics of Growth and Development, Himalaya Publishing House, Mumbai.
15. एम० एल० शिंगन, विकास का अर्थशास्त्र एवं आयोजन, वृन्दा पब्लिकेशन, नई दिल्ली।

Paper-4

SEMESTER III

(OPTIONAL PAPER)

RESEARCH METHODOLOGY AND ESSAY

PAPER CODE : 1281

Note Paper Shall consist of Two Part part one will consist of question On research methodology and second part will consist of three options on essay anyone topic can be attempted by the candidate.

Science and Scientific Method. Social Investigation and Social Research. Selection, Nature and Identification and Formulation of a Research Problem. Model, Paradigm and Theory Building. Research Design. Experimental Designs in Business, Social and Economic Research. Survey of Related Literature. Research Methods and Procedures. Historical Method. Descriptive Research. Action Research. Formation of Concepts. Field Study. Field Experiment. Hypothesis. Fact and Theory : Definition and Inter-relations.

From Theory to Research Design. Empirical Methods. Documentary and Field Data. Questionnaire and Interview. Measurement through Scaling Methods. Data Generation through Simulation. Statistical Tools and Techniques in Business, Agricultural and Social Research.

Economy of Uttarakhand. Current Fiscal Policy, Current Agricultural Price Policy, Horticulture Economy, Current Industrial Policy, Tourism Policy of Uttarakhand, Economic implications of Migration and Disaster. Unemployment Problem, Natural resources.

Recommended Reading (Latest Editions) :

1. R.N.Trivedi & D.P.Shukla : Research Methodology (in Hindi).
2. Kumar : Research Methodology.
3. पारस राय, अनुसंधान परिचय ।
4. एच० के कपिल, अनुसंधान विधियां, एच०पी० भार्गव बुक हाऊस आगरा
5. Tandon : Research Methodology in Social Sciences.
6. Kothari, D.S. : Research Methodology.
7. Yojna.
8. Economic Times, Financial Express and other Newspapers.
9. Economic Magazines.
10. Reports of various agencies.
11. Cauvery,R., ed.al., Research Methodology, S. Chand, New Delhi.
12. Sharma, Manoj, Research Methodology, Anmol Publications, New Delhi, 2004.

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REGIONAL ECONOMICS* PAPER CODE : 1282

Nature and Scope of Regional Economics : Integration of Regional and Urban Economics. Concept and Definition of Area, Space and Region, Types of Regions. Regional Delineation Approaches. Indicators of Regional Development.

Spatial Micro-Economic Theory : Theory of Location and Spatial Structure. Partial Equilibrium Approach--Weber and Isard's Theory of Location. The Market Area Analysis. The Behavioural Theory. General Equilibrium Approach - Locational Interdependence and Spatial Competition, Loschian Spatial General Equilibrium.

Locational Concepts and Measures - Location Quotient, Localisation Coefficient. Central Place Theory - Growth Pole, Gravity Models and Spatial Interaction Models. Regional Dispersal and Agglomeration. Economies and Diseconomies.

Spatial Macro Economies: Regional Income Determination in a Multi-regional System. Dimensions and Determinants of Regional Growth and Development.

Regional Development Theories and Growth Models-The Economic Base Theory, Industrial Structure and Sector/Stage Theory. Adaptation of Macro-Economic Growth Models. Cumulative Causation Models. Regional Cycles and Multipliers- Divergence and Convergence Tendencies. Inter-regional Resource Mobility and Innovation Diffusions.

Recommended Reading (Latest Editions) :

1. Hoover, E.M. (1975) : An Introduction to Regional Economics, Alfred A. Knopf, New York.
2. Richardson, H.W. (1969) : Elements of Regional Economics, Penguin, Harmondsworth.
3. Mckee, D.L. et. al. (eds.) (1970) : Regional Economics, Theory and Practice, Free Press, New York.
4. Needleman, I. (ed.) (1968) : Regional Analysis, Penguin, Harmondsworth.
5. Richardson, H.W. (1969) : Regional Economics Weidenfield and Nicholson, London.
6. Dean, R.D. et. al. (1970) : Regional Economics, Theory, Free press, New York.
7. Isard, W. (1956) : Location and Space Economy, John Wiley, New York.
8. Isard, W. and J.H. Cumverland (eds.) (1960) : Regional Economic Planning, OECD, Paris.
9. Siebert, H. (1969) : Regional Economic Growth : Theory and Policy, International Textbook Company, Sorcenton.
10. Bhadouria, B.P.S. (1986) : Regional Economic Development : Theory and Policy, Anmol Publications, New Delhi.
11. Friedman, J. and Walonso (eds.)(1975) : Regional Development Planning - A reader, MIT Press, Cambridge, Mass.
12. Isard, W. (1960) : Methods of Regional Analysis, MIT Press, Westmead.
13. Paelinck, J.H. and P. Nijkamp (1976) : Operational Theory and Methods in Regional Economics, Saxon House, Westmead.

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14. Lefeber, L. and M. Dutta- Chaudhuri (1971) : Regional Development Experience and Prospects in South and South-East Asia, Mouton, The Hague.
- Misra, R.P. et. al. (1978) : Regional development Planning in India, Vikas Publishing House, New Delhi.
16. Nair, K.R.G. (1986) : Regional Disparities in India, Agricole Publishing Academy, New Delhi.
17. Bhadouria, B.P.S. (1986) : Disparities and Development Policy A Regional Perspective, Anmol Publications, New Delhi.
18. Chand, M. and V.K. Puri (1983) : Regional Planning in India, Allied Publishers, New Delhi.
19. Planning Commission (1981) : Report of the National Committee on the Development of Backward Areas, Government of India, New Delhi.
20. Joshi, S.C., Uttaranchal, Gyanodaya Prakashan, Nainital.
21. प्रेम स्वरूप सकलानी, हिमालय की सम्पदा, श्री अल्मोड़ा बुक डिपो, अल्मोड़ा, 1998।

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AGRICULTURAL ECONOMICS PAPER CODE : 1283

Nature and Scope of Agricultural and Rural Economics. Role of Agriculture in Economic Development. Interrelationship between Agriculture and Industry. Interaction between Agriculture and Rest of the Economy.. Diversification of Agriculture.

Agriculture and Allied Activities. Livestock Resources, White Revolution. Fishery and Poultry Development. Blue Revolution. Forestry, Horticulture and Floriculture. Rural Industrialisation Agro-based Industries. The Institutional and Infrastructural Development for Agriculture Growth.

Agricultural Production – Resource Use and Efficiency.. : Agricultural Growth. Demand and Supply and Allocation of Basic Inputs---Labour, Land, Irrigation, Fertiliser, HYV Seeds, Form of farming, Organic Farming, Sustainable Farming. Livestock Energy, Machinery and Equipment. Factor Combination and Resource Substitution. Cost and Supply Curves. Farm Size - Returns to Scale and Productivity. Farm Budgeting and Cost Concepts. Technology in Agriculture – Traditional Techniques and Practices. Technological Change and Agriculture. Distribution of Gains from Technological Change. Green Revolution. Sustainable Agriculture. Emerging Trends in Agricultural Technology. Dry Land Farming. Use of Bio-technology. Economics of Small Farmers.

Principles of Land Utilisation. Land Distribution – Structure and Trends. Land Tenures and Farming Systems – Peasant, Capitalist, Collective and State Farming. Tenancy and Crop Sharing – Forms, Incidence and Effects. Land Reforms in India –Performance. Women and Land Reforms. Problems of Marginal and Small Farmers.

Rural Labour Supply. Mobility of Labour and Segmentation in Labour Markets. Marginalisation of Rural Labour. Concepts and Measurements of Rural Unemployment. Nature ,Problem of Rural Unemployment. Agricultural Wages in India. Wage Differentials. Non-agricultural Rural Employment Measurement of Rural Poverty. Poverty Alleviation Programmes in India.

Recommended Reading (Latest Editions) :

1. Heady, E.O. : (ed.) Economic Development of Agriculture.
2. Snodgrass, Milton M. and L.T. Wallace : Agricultural Economic and Resource Management, Prentice Hall of India Pvt. Ltd., 1977.
3. Eicher, Earl and Lawrence Witt (ed.): Agriculture in Economic Development: Vora Co. Pub. Pvt. Ltd. 1970.
4. Shah, C.H. and C.N. Vakil (ed.) : Agriculture Development of India : Policy and Problems, Orient Longman, 1979.
5. Southworth N. and A. Johnston : Agriculture Development and Economic Growth, Cornell University Press.
6. एस० बी० गुप्ता, कृषि अर्थशास्त्र, एस० बी० पी० डी० पब्लिकेशन आगरा।
7. Chaudhari, Primit : Selected Readings in Indian Agriculture.
8. R.S.Jalal, “RURAL DEVELOPMENT IN INDIA : ISSUES AND POLICY” (Vol. I & II), Anmol Publication, New Delhi
9. Govt. of India : Report of the National Commission on Agriculture.

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10. Rao, H.H. : Technological Change and Distribution of Gains.
10. Rudra, Ashok : Indian Agricultural Economics : Myths and realities, Allied Pub., New Delhi, 1982.
11. Mitra, A : Terms of Trade and Class Relations.
12. Schultz, T.W. : Economic Crisis in World Agriculture.
13. Schultz, T.W. : Transforming Traditional Agriculture.
14. Govt. of India : Five Year Plans (Documents).

SEMESTER III

LABOUR ECONOMICS PAPER CODE : 1284

Nature and Characteristics of Labour Markets in a Developing Economy. Characteristics of Indian Labour Market. Demand for labour, Supply of Labour and Growth of Labour Force, Migratory Character. Absentism, Labour Turnover.

Recruitment of Industrial Worker, Employment Exchange, National employment Service in India, Types of Recruitment, Rural Agricultural Labour in India, Labour Productivity.

Unemployment – Causes, Types and Remedies. Trend of Unemployment in India, Rationalisation, Analysis of Educated Unemployment, Employment Programmes in India.

Types of Wage Payment, - Time System, Piece System, Incentive System. Various Concept of Wages – Minimum Wage, Fair Wage and Living Wage.

Wage Determination on Various Sectors- Rural, Urban, Organised and Unorganised Sectors, Bonus, Profit Sharing and Co-partnership. Recent changes in Labour Policy.

Recommended Reading (Latest Editions) :

- 1.Allen, V.L. : Power in Trade Unions.
- 2.Beveridge, W.H. : Social Security Plan.
- 3.Chamberlain, N.W. : Collective Bargaining.
- 4.Clow, A. G. : Indian Factory Legislation.
- 5.Das, N. : Unemployment and Full Employment in India.
- 6.Deshpande, L.K. Brahmmananda P. R. (Ed.) : Employment Policy in a Developing Economy.
- 7.Deshpande, D. K. and Sandesara, J.C. (Ed.) : Wage Policy and Wage Determination in India.
- 8.Dobb, M. : Wages.
- 9.Gilman, N.P. : Profit Sharing Between Employer and Employee.
- 10.Gadgil, D.R. : Women Workers in India.
- 11.Hicks, J.R. : Theory of Wages.
- 12.Giri, V.V. : Labour Problems in Indian Industry.
- 13.Joshi, N.N. : Trade Union movement in India.
- 14.Kaul, N.N. : India and the I.L.O..
- 15.Kether, D.P. : India's Labour Welfare.
16. Mukerjee, R.K. : The Indian Working Class.
- 17.Mukerjee, P.K. : Labour Legislation in India.
- 18.टी० एन० भगोलीवाल, श्रम अर्थशास्त्र एवं औद्योगिक संरक्षण।
- 19.Memoria, C.B. : Labour Problems and Social Welfare in India. (हिन्दी रूपान्तर)

SEMESTER III

ENVIRONMENTAL ECONOMICS*

PAPER CODE : 1285

Theory and Basic Concept of Environmental Economics. Meaning, Subject matter of Environmental Economics, Environment and Growth. Economics of Recycling and Waste Management. Biodiversity Crisis. Sustainable Tourism.

Nature of Ecological Economics : Introduction, Bio-economics and Spatial Economics. Ecology and Economic Growth.

Welfare Criteria of Environmental Analysis : Pareto criterion. Pigovian Analysis of Externalities, Compensation Criterion, Social Choice and Justice, Environmental Quality as a Public Good, Market Failure.

Economic Growth and Environment : The Costs of Economic Growth, Environmental Quality and Economic Development, Sustainable Development, Green Marketing, Clean Technology of Production and Transfer Technology

Human Population and Environment : Population Growth in India, Population Policy in India, Family Planning in India, HIV/AIDS in Developing Countries : Protective and Preventive Measures. Prevention and Control AIDS in India, Population Growth and Environmental Linkages, Environment and Human Health.

Recommended Reading (Latest Editions) :

1. Jhingan, M.L., Environmental Economics : Theory, Management and Policy, Vrinda Publication, New Delhi.
2. Anthony, C.Fisher, Environment and Resource Economics, 1995.
3. Sharma, Environmental Economics, National Publication, New Delhi.
4. Awasthi, N.M. and P.R.Pande, Environmental Studies, Laxmi Narayan Agarwal Pub, Agra.
5. Awasthi, N.M., Paryawarniya Adhyan, Laxmi Narayan Agarwal Pub, Agra.
6. Rao, V.K. & R.S.Reddy, Environment Education, Commonwealth Publishers, New Delhi.
7. Murthi, M.N., Economic Evaluation of Environmental Programmes, Commonwealth Publishers, New Delhi.
8. Vohra, P. & R.Mehta, Environmental Economics, Commonwealth Publishers, New Delhi.
9. Sankar, Ulaganthan ed., Environmental Economics, OUP, New Delhi, 2001.
10. Perman, R.Ma and J. McGilvary: Natural Resource and Environmental Economics.
11. Mehta,S., S.Mundle and U.Sankar: Controlling Pollution: Incentives and Regulation, SAGE, NewDelhi.
12. Dasgupta, P.S. and G.M.Heal: Economic Theory and Exhaustible Resources, Cambridge University Press, Cambridge.
13. ESCAP: Accounting and Valuation of Environment – A Primer for Developing Countries, Vol.I, United Nations, New York.
14. Sengupta, R.P.: Ecology and Economics: An Approach to Sustainable Development, OUP, New Delhi.

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15. Chopra, Kanchan et.al. (eds.), Ecological Economics for Sustainable Development, Academic Foundation, New Delhi.
16. Eugmi, T., Environmental Economics, Vrinda Publications, Delhi, 2004.
17. Das Gupta, N., Environmental Accounting, S. Chand, New Delhi.
18. Karpagam, M., Environmental Economics A Textbook, Sterling Publishers Pvt. Ltd., New Delhi.
19. Kolshad, Charles D., Environmental Economics, Oxford University Press, New York.

SEMESTER III

ECONOMETRICS

PAPER CODE : 1286

Role of Measurement in Economics. Stochastic Approach. Normal Probability Distribution. Sources and Types of Data. Exogenous, Endogenous and Predetermined Variables. Parameters. Econometric Model. Recursive Model. Estimation of Single Equation Model – General Case.

Least Squares Methods –

- (a) Method of Ordinary Least Squares (OLS) and Classical Least Squares (CLS) : Assumptions, Estimates of Parameters, Characteristics, Standard Error, Estimates of Disturbance. Variance. Coefficient of Partial and Multiple Correlation. Coefficient of Determination. Multicollinearity. Prediction.
- (b) Method of Generalized Least Squares (GLS). Heteroscedastic Disturbances. Auto-Correlation. Estimation of Regression Coefficients. Prediction.
- (c) Method of Restricted Least Squares (RLS). Pooling of Cross Section and Time Series Data.

Identification: Identification in the Case of Structural Form and Reduced Form Models. First Order and Second Order Conditions. Limitations.

Recommended Reading:

1.L.R.Klein: A Textbook of Econometrics., 2.J.Johnston: Econometric Methods.; 3.P.Schmidt: Econometrics.
4.Rao and Miller: Applied Econometrics.; 5.Carl F. Christ: Econometric Methods.; 6.G.Tintner: Econometrics.
M.D.Intriligator: Econometric Models: Techniques and Applications.
7.G.S.Maddala: Econometrics.; 8.G.C.Judge,et al.: Theory and Practice of Econometrics.; 9.R.Stone: The Role of Measurement in Economics; 10Apte: Textbook of Econometric

SEMESTER III

ADVANCED STATISTICS

PAPER CODE : 1287

Note: The paper shall consist of questions from theory as well as numerical. No proof of formula or theorems is required. This paper shall have two sections – section A consisting of theoretical questions and section B consisting of numerical questions.

(Simple Calculator without mathematical and statistical functions is allowed but candidates shall have to arrange the calculator at their own)

Planning and Executions of Statistical Survey. Collection, Classification, Tabulations and Presentation of Data.

Theory of Probability: Theoretical and Empirical Definitions of Probability. Theorems of Total and Compound Probability. Conditional Probability. Binomial, Poisson and Normal Distributions.

Sampling Theory and Design of Sample surveys: Theoretical Basis of sampling, Methods and types of Sampling, Errors in Sampling, Merits and Limitations of Sampling.

Different Types of Average. Standard Deviation. Variance. Probable Error. Gini's Mean Difference. Lorenz Curve. Skewness, Moments and Kurtosis.

Simple, Partial and Multiple Correlation and Regression Analysis (in case of three variables) . Reliability of Estimates. Coefficient of Multiple Determination. Association of Attributes. Partial Association.

Statistical Organization in India. C.S.O and N.S.S. Population Censuses in India. Detailed study of the recent two Population Censuses. Methods of Estimating National Income in India.

Recommended Reading (Latest Editions) :

1. Allen, R.G.D., Statistics for Economics, Hutchinson, London.
2. Cochran, Sampling Techniques, John Wiley, New York.
3. Croxton and Cowden, Applied General Statistics, Prentice Hall, London.
4. Yamane, Taro, Statistics- An Introductory Analysis, Harper & Row, New York.
5. Des Raj, The Design of Sample Surveys, McGraw Hill, New York.
6. Wonnacott, T.& R. Wonnacott, Introductory Statistics for Business and Economics, John Wiley, N.Y.
7. Deming, W. Edwards, Theory of Sampling, John Wiley, New York.
8. Gupta, S.C., Fundamentals of Statistics, Himalaya Publishing House, Mumbai.
9. Gupta, S.P., Statistical Methods, Sultan Chand, Delhi.
10. Gupta, S.P., Statistical Methods (Hindi Edition), Sultan Chand, Delhi.
11. Singh, S.P., Statistics: Theory and Practice (Hindi Edition), S. Chand, Delhi.
12. Karmel, P.H. & M. Polasek, Applied Statistics for Economics, Pitman Publishing, London..
13. Srivastava, S.C. & Sangya Srivastava, Fundamentals of Statistics, Anmol Publications, New Delhi.

SEMESTER III

DEMOGRAPHY PAPER CODE : 1288

Theories of Population: Malthusian Theory. Post Malthusian Theories. Optimum Theory. Theory of Demographic Transition. Easterlin and New Home Hypothesis. Population Cycles. Methodology of Demographic Research: Vital Statistics.

Measures of Fertility and Reproduction. Measures of Mortality. Concept and Use of Life Table. Reproductive and Child Health in India. Temporal and Spatial Variation in Sex Ratios. Methods of Population Projection. Stable, Stationary and Quasi-stationary Population Model. Aging of Population in India – Age Structure of Population. Changes in Family Structure and Old Age Security.

Population Growth and Economic Development. Population, Health, Poverty and Environment Linkage in India. Effect of Population Growth on Savings and Capital Formation. Population-Unemployment and Food Supply. Qualitative Control of Population. Human Development Index. Human Resource Development. Concept of Demographic Dividend.

Recommended Reading:

1. Agarwala, S.N.: India's Population Problem., Tata McGraw Hill, Bombay.
2. Agarwal, U.D.: Population Projections and Their Accuracy, B.R.Publishing Corporation, New Delhi.
3. Bhende, A.A. and T.R.Kanitkar: Principles of Population Studies, Himalaya Publishing House, Bombay.
4. Bogue, D.J.: Principles of Demography, John Wiley, New York.
5. Bose, A.: India's Basic Demographic Statistics, B.R.Publishing Corporation, New Delhi.
6. Census of India: Various Reports.
7. Choubey, P.K.: Population Policy in India, Kanishka Publications, New Delhi.
8. Misra, B.D.: An Introduction to the Study of Population, South Asia Publishers, New Delhi.
9. Srinivasan, K.: Basic Demographic Techniques and Applications, Sage Publications, New Delhi.
10. Krishnaji, M., R.M.Sudrashan and A.Shariff: Gender Population and Development, OUP, New Delhi.
11. Ramakumar, R., Technical Demography, New Age International, New Delhi.
12. श्रीवास्तव, एस0सी0, जनांकिकीय अध्ययन के प्रारूप, हिमालया पब्लिशिंग हाऊस, मुम्बई।
13^प वि0 कुमार एवं गुप्ता, जनांकिकी, एस0 बी0 पी0 डी0 पब्लिकेशन आगरा।
14^प 11. एस0 बी0 गुप्ता, औद्योगिक अर्थशास्त्र, एस0 बी0 पी0 डी0 पब्लिकेशन आगरा।
15. 12. Mishra, Jai Prakash, Janankiki, Sahitya Bhawan Publications, Agra.
16. Srivastava, S.c., Studies in Demography, Anmol Publication, New Delhi.
17. Pande, G.C., Principle of Demography, Anmol Publication, New Delhi.

SEMESTER III

INDUSTRIAL ECONOMICS

PAPER CODE : 1289

Note: To the extent possible, the topics will be discussed with special reference to India. The various aspects of public policy in the field of Industry in India will be assessed in the course of discussion of the topics.

Scope and Method of Industrial Economics. Industrial Efficiency:. Organisational Form and Alternative Motives of the Firm. Structure-Conduct-Performance.Demand Analysis and Demand Forecasting. Efficiency and Size of the Firm. Effect of Firm Size on other Performance Indicators. Concept and Measurement of Profitability. Determinants of Profitability. Theory of Profitability.

Market Concentration: Concept, Measurement and Extent. Concentration and Market Performance of a Firm.

Diversification, Vertical Integration and Merger: Definitions, Motives, and Measurement. Empirical Evidences and their Implications.

Growth of the Firm. Conceptual Framework for the Theory of Growth of the Firm . Pricing Decisions: General Situations for Pricing Decisions. Pricing Procedures. Pricing in Public Enterprises. Economics of Advertising.

Process of Innovation.. Theory of Technological Innovation. Diffusion of New Technology. Market Structure and Innovations. R & D and Innovation. Production Control. Cost Control.. Quality Control. Case Study of Selected Industries in India: Iron and Steel Industry. Cement Industry Engineering Goods Industry. Service Sector Industries.

Recommended Reading:

1. Ahluwalia, I.J.: Industrial Growth in India, OUP, New Delhi.
2. Barthwal, R.R.: Industrial Economics, Wiley Eastern, New Delhi.
3. Jalal, R.S.: “Industrial Entrepreneurship”, Anmol Publication, New Delhi.
4. Cherunilam, F.: Industrial Economics: Indian Perspective, Himalaya Publishing House, Mumbai.
5. Desai, B.: Industrial Economy in India, Himalaya Publishing House, Mumbai.
6. Hay,D. and D.J.Morris: Industrial Economics: Theory and Evidence, OUP, New Delhi.
7. Kuchhal, S.C.: Industrial Economy of India, Chaitanya Publishing House, Allahabad.
8. Government of India: Economic Survey (Annual).
9. Smith, D.M.: Industrial Location: An Economic and Geographical Analysis, John Wiley, New York.
10. Mamoria and Mamoria: Dynamics of Industrial Relations in India, Himalaya Publishing House, Mumbai.
11. Dasgupta, P.S., Marglin and A.Sen: Guideline for Project Evaluation, Unido Publications,New York.

SEMESTER III

ECONOMICS OF INFRASTRUCTURE *

PAPER CODE : 1290

Infrastructure and Economic Development. Infrastructure as a Public Good. Social and Physical Infrastructure. Special Characteristics of Public Utilities. The Peak-load, Off-load Problem, Dual Principle Controversy. Economies of Scale of Joint Supply. Marginal Cost Pricing. Other Methods of Pricing in Public Utilities. Cross-Subsidization. Free Prices, Equity and Efficiency. Effects of Competition and Monopoly on Productivity and Performance.

The Structure of Transport Costs and Location of Economic Activities. Demand for Transport. Models of Freight and Passenger Demand. Cost Functions in the Transport Sector. Principle of Pricing. State Regulation of Prices. Development of Rail, Road, Water and Air Transport in India. Special Problems of Individual Modes of Transport. Inter-modal Condition in India.

Development and Growth of the Telecommunication Sector in India. Growth of Coverage. State Monopoly to Privatisation. Investment in Telecommunication Sector. Efficiency and Services under Private Firms and Government Ownership. Determination of Rates in Various Telecommunication Services. Characteristics of Postal Services. Criteria for Fixation of Postal Rates.

Primacy of Energy in the Process of Economic Development. Factors Determining Demand for Energy. Effects of Energy Shortages. Energy Conservation. Conventional, Renewable and Non-Conventional Sources of Energy. Energy Modelling. Energy Situation in India – Sources, Supply and Demand. Inter-regional Variations in Energy Supply and Demand. An Optimal Energy Policy in the Indian Context.

Relative Economics of Thermal, Hydel and Nuclear Energy. The Case for a National Power Grid. Pricing of Power. Financing Water Utilities. Urban and Rural Water Supply. Water Pricing. Exploration and Production of Natural Gas – Problems and Prospects. Pricing Problem.

Recommended Reading:

1. Crew, M.A. and P.R. Kleindorfer : Public Utility Economics, Macmillan, London.
2. ICSSR : Economics of Infrastructure.
3. NCAER : India Infrastructure Report: Policy Implications for Growth and Welfare.
4. Parikh : India Development Report –1999-2000.
5. Turvey, R (ed): Public Enterprises, Penguin, Harmondsworth.
6. Nelson, J.R.: Marginal Cost Pricing in Practice, Prentice-Hall, Englewood- Cliff.
7. Kneafsey, J.T.: Transportation Economic Analysis, Lexington, Torouts.
8. Norton, H.S.: Modern Transport Economics, C.E.Merrill, London.
9. GOI: Interim Report of P&T Enquiry Committee, Govt.of India, New Delhi.

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10. Jha,R, M.N.Murty and S.Paul: On Fixing Prices for Postal Services in India, National Institute of Public Finance and Policy, New Delhi.
11. Centre for Monitoring Indian Economy: India: Energy Sector, CMIE, Mumbai.
12. Parikh , J.: Energy Models for 2000 and Beyond, Tata McGraw Hill, New Delhi.
13. Turvey, R. and D.Anderson: Electricity Economics, Johns Hopkins University Press, Baltimore.

SEMESTER III

ECONOMICS OF GENDER AND DEVELOPMENT* PAPER CODE : 1291

Importance Women Studies. Women in Patriarchal and Matriarchal Societies and Structures. Patrilineal and Matrilineal Systems and their Present Day Relevance. Economic Basis and Functioning of Patriarchy in Developed and Developing Countries with Special Reference to India. Gender Bias in the Theories of Value, Distribution and Population.

Demography of Female Population – Age Structure, Mortality Rates and Sex Ratio. Causes of Declining Sex Ratios and Fertility Rates in LDCs particularly India. Theories, Measurement and Control of Fertility. Access of Women to Nutrition, Health, Education and Social and Community Resources and their Impact on Female Mortality, Fertility, Economic Status and Work Participation Rate.

Factors Affecting Decision Making by Women. Property Rights, Access to and Control over Economic Resources, Assets and Income Flows. Power of Decision at Household, Class, Community Level. Economic Status of Women and its Effect on Work Participation Rate, Income Level, Health and Education in Developing Countries and India. Role of Kinship in Allocating Domestic and Social Resources.

Concept and Analysis of Women's Work – Valuation of Productive and Unproductive Work, Visible and Invisible Work, Paid and Unpaid Work, Economically Productive and Socially Productive Work. Economic Status, Private Property, and Participation of Women in Pre-industrial and Industrial Societies – Female Contribution to National Income.

Recommended Reading:

1. Boserup, E. : Women's Role in Economic Development, George Allen and Unwin, London.
2. Desai, N. and M.K.Raj (eds): Women and Society in India, Research Centre for Women Studies, SNDT University, Bombay.
3. Govt. of India: Towards Equality – Report of the Committee on the Status of Women in India, Deptt. Of Social Welfare, Ministry of Education and Social Welfare, New Delhi.
4. Krishnaraj, M., R.M.Sudharshan and A.Shariff: Gender, Population and Development, OUP, New Delhi.
5. Seth, M.: Women and Development: The Indian Experience, Sage Publications, New Delhi.
6. Venkateswaran, S.: Environment, Development and the Gender Gap, Sage Publications, New Delhi.

SEMESTER III

ECONOMICS OF INSURANCE* **PAPER CODE : 1292**

Economic Security. Role of Insurance. Definition of Insurance. Risk Pooling and Risk Transfer. Economic and Legal Perspectives. Social vs. Private Insurance. Life vs. Non-life Insurance. Classification of Life, Health and General Insurance Policies.

Fundamentals of Uncertainty and Risk. Pure Risk and Speculative Risk. Expected Utility and Decision Making Under Uncertainty. Expected Utility and the Demand for Insurance. Moral Hazard and Insurance Demand. Concept of Risk Management. Essentials of Risk Management. Elements of Risk Management – Risk Assessment. Risk Control and Risk Financing. World-wide Risk Sharing – Concept of Reinsurance. Fundamentals of Reinsurance. Types of Reinsures. Reinsurance Distribution Systems. Reinsurance Markets in Developing Countries. Risk Management and Insurance in Economic Development. Insurance Institutions as Financial Intermediaries. Insurance Institutions as Investment Institutions. Insurance Institutions in Indian Capital Market. Regulations Governing Investments of Insurance Institutions in India.

Fundamentals of Life and Health Insurance. Functions of Life and Health Insurance. Mathematical Basis of Life Insurance. Plans of Life Insurance. Provisions of Policies. Selection and Classification of Risks. Basics of Premium Construction. Valuation and Distribution of Surplus. Individual Health Insurance – Uses and Types of Evaluation. Principles of Underwriting of Life and Health Insurance. Group Insurance and Superannuating Schemes. Privatization of Life and Health Insurance. Setup and Management of Insurance Companies.

Recommended Reading:

1. *Bailey, R.(ed): Underwriting in Life and Insurance, LOMA, Atlanta.*
2. *Bickelhaupt, D.L.: General Insurance, Irwin Inc., Burr Ridge, Ill.*
3. *Black, K. and H.D.Skipper : Life and Health Insurance, Prentice Hall, New Jersey.*
4. *Finsinger, J. and M.V.Pauly (eds): The Economics of Insurance Regulation: A Cross National Study, Macmillan, London.*
5. *Head,G.L. and S.Horn II: Essentials of Risk Management, Insurance Institute of America, Malvern, Pa*
6. *Skipper, H.D.: International Risk and Insurance: An Environmental Management Approach, Irwin McGraw Hill, Boston.*
7. *Dionne, G. and S.E.Harrington(eds): Foundations of Insurance Economics, Kluwer Academic Publishers,Boston.*
8. *UNCTAD: The Promotion of Risk Management in Developing Countries, UNCTAD, Geneva.*
9. *Insurance Institute of India: Life Assurance Underwriting, IC-22, Mumbai.*
10. *Insurance Institute of India: General Insurance, IC-34, Mumbai.*

SEMESTER III

FINANCIAL INSTITUTIONS AND MARKETS PAPER CODE : 1293

Components of Money Supply. Money and Finance. Money and Near Money. Money Market and Capital Market. Regulated and Unregulated Credit Markets. Features of a Developed Money and Capital Market. Financial Intermediation and Financial Intermediaries. Structure of the Financial System. Functions of the Financial Sector. Indicators of Financial Development. Equilibrium in the Financial Markets. Financial System and Economic Development. Functions, Types and Objectives of Commercial Banks.

Mechanism of Credit Creation by the Commercial Banks. Purpose and Limitations. Prerequisites of a Sound Commercial Banking System. Criteria of Asset Evaluation. Risk and Financial Assets. Types of Risk. Return on Assets. Risk-Return Trade-off. Valuation of Securities. Liberalisation of the Financial System in India. Direction of Future Reforms.

Theories of Interest Rate Determination. Level of Interest Rates. Long Period and Short Period Interest Rates. Term Structure of Interest Rates. Lending and Deposit Rates. Administered Interest Rates. Appropriate Interest Rate Policy.

Functions of Central Bank. Instruments of Credit Control. Aims and Objectives of Monetary Policy in Developed and Developing Countries. Instruments of Monetary Policy. Role and Functions of the Reserve Bank of India. Development and Regulatory Role of the RBI. Recent Monetary Policy of the RBI. Definition and Types of Non-Bank Financial Institutions – Their Role, Growth, Functions and Effects. Measures Taken to Control their Operations. Cooperatives and Regional Rural Bank -Their Objectives, Role and Limitations. Definition, Types, Functions, Growth and Importance of Non-Banking Financial Institutions – Mutual Funds, LIC, Structure of investment Companies, Venture Capital. Banking and Financial Sector Reforms and their Impact on Economic Growth in India. Monetary Management in India.

Recommended Reading:

1. Bhole, L.M.: Financial Institutions and Markets, Tata McGraw Hill, New Delhi.
2. Bhole, L.M.: Indian Financial System, Chugh Publications, Allahabad.
3. Hanson, J.A. and S. Kathuria : India : A Financial Sector for the Twenty First Century, OUP, New Delhi.
4. Khan, M.Y.: Indian Financial System, Tata McGraw Hill, New Delhi.
5. Machiraju, M.R.: Indian Financial Systems, Vikas Publishing House, New Delhi.
6. Prasad, K.N.: Development of India's Financial System, Sarup and Sons, New Delhi.
7. Johnson, H.J.: Financial Institutions and Markets, Mc Graw Hill, New York.
8. Harker, P.T. and S.A. Zenios (ed): Performance of Financial Institutions, Cambridge University Press.
9. Chandra, P.: Financial Markets, Tata McGraw Hill, New Delhi.
10. Machiraju, M.R.: International Financial Markets in India, Wheeler Publishing House, Allahabad.
11. Farrell, J.L.: Portfolio Management, McGraw Hill, New York.

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12. Smith,P.F.: Money and Financial Intermediation: The Theory and Structure of Financial System, Prentice Hall, Englewood-Cliff, New Jersey.
13. Rangarajan, C,: Indian Economics: Essays on Money and Finance, UBS Publication, New Delhi.
RBI : Functions and Working of RBI

SEMESTER III

Computer Application in Economics* **PAPER CODE : 1294**

Basic Components of Computer: Input-Output Devices, The CPU, VDU, Keyboard, Mouse and Scanner, Printers and Plotters, Data Storage and Retrieval, Hard Disk Drive, Floppy Disk Drive, CD ROM.

Types of Computers and their Applications. Computer Networking and Resource Sharing. Hardware, Software and Firmware.

Examples and Techniques in Programming Languages like C, C++, Visual, Basic.

MS-Windows, MS-Office, MS-Word, MS-Excel. Fox Pro – Basic Commands, Application Programmes.

Recommended Reading:

1. *Sanders, D.H.: Computers Today, McGraw Hill, New York.*
2. *Sinha, P.K.: Computer Fundamentals, BPB Publications, New Delhi.*
3. *Rajaraman, V.: Fundamentals of Computers, Prentice Hall of India, New Delhi.*

SEMESTER III

HISTORY OF ECONOMIC ANALYSIS PAPER CODE : 1295

Pre-Scientific Economic Thought : Nature and Significance of History of Economic Thought, Ancient Economic Thought, Medieval Economic Thought, Mercantilism, Physiocracy

The Classical Tradition : Development of Classical Economics, Adam Smith, Thomas Robert Malthus, David Ricardo, John Stuart Mill.

The Socialists : Jean Charles Leonard Sismondi, St. Siman and the St. Simonians, Associationism : Robert Owen, Karl Marx, Other Schools of Socialism.

Recommended Reading (Latest Editions) :

1. Schumpeter, J.A.: *A History of Economic Analysis*.
2. Stigler, G.J. : *Essays in the History of Economics*.
3. Dobb, Maurice : *Theories of Value and Distribution since Adam Smith*.
4. O'Brien: *Classical Theory of Value and Distribution*.
5. Gide and Rist : *History of Economic doctrines*. (हिन्दी रूपान्तर)
6. Meek, R.L. : *Physiocracy*.
7. Meek R.L. : *The Labour Theory of Value*.
9. Ricordo, David : *Principles of Political Economy and Taxation Edited by P. Sraffa, Chap. I to VII*.
11. Smith, A. : *Wealth of Nations, Book I, Chap. I to X*.
12. Blaug, Mark : *Economic Theory in Retrospect*.
13. Stigler, G.J. : *Production and Distribution Theories*.
14. Roll, Eric : *History of Economic Thought*.
15. Haney: *History of Economic Thought*.
16. Sheshadri, G.B.: *Economic Doctrines*.
17. Ganguli, B.N. : *Indian Economic Thought: A 19th Century Perspective*.
18. वी०सी० सिन्हा, आर्थिक विचारों का इतिहास, एस० बी० पी० डी० पब्लिकेशन आगरा।